

ABSTRACT OF THE DISCLOSURE

An microfluidic platform employs a two-dimensional matrix array of drive electrodes and at least one ground line on a bottom substrate, eliminating the need for a top plate or cover, to allow easy access to the active surface of the microfluidic platform. The open microfluidic platform may, for example, allow the depositing of samples via an array of pipettes or other automated deliver systems, and/or the use of standard video equipment to focus on the active surface to track positions of fluid bodies. A user may move fluid bodies and perform operations in real time and/or create animation files for later execution using a pointing device and a display device such as a monitor.

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